COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

THE APPLICATION OF BIG RIVERS)
ELECTRIC CORPORATION, LOUISVILLE)
GAS AND ELECTRIC COMPANY, WESTERN)
KENTUCKY ENERGY CORP., WESTERN)
KENTUCKY LEASING CORP., AND LG&E) CASE NO. 97-204
STATION TWO INC. FOR APPROVAL OF)
WHOLESALE RATE ADJUSTMENT FOR BIG)
RIVERS ELECTRIC CORPORATION AND)
FOR APPROVAL OF TRANSACTION)

ORDER

IT IS ORDERED that Alcan Aluminum Corporation ("Alcan"), Southwire Company ("Southwire"), Willamette Industries, Inc. ("Willamette"), and the Attorney General's Office ("AG") shall file the original and 12 copies of the following information with the Commission no later than November 4, 1997, with a copy to all parties of record. Each copy of the data requested should be placed in a bound volume with each item tabbed. When a number of sheets are required for an item, each sheet should be appropriately indexed, for example, Item 1(a), Sheet 2 of 6. Include with each response the name of the witness who will be responsible for responding to questions relating to the information provided. Careful attention should be given to copied material to ensure that it is legible.

Alcan and Southwire shall respond to Items 1-56; Willamette shall respond to Items 57 to 59; and the Attorney General shall respond to Items 60-62.

- 1. Refer to the Direct Testimony of Allan B. Eyre, page 14. Mr. Eyre states that the proposed three tier rate structure creates an economic incentive for Alcan to return to full production.
 - a. Describe the referenced economic incentive available to Alcan.
- b. Describe the economic factors other than the price of electricity which would be considered by Alcan when determining the level of production to maintain or expand at one of its facilities.
- c. Is Mr. Eyre contending that the price of electricity is the sole determinant factor in any decision regarding production levels at the Sebree facility? Explain the response.
- 2. Refer to Eyre Direct Testimony, page 25. Mr. Eyre states that no other customers of Big Rivers are making 13 and 14 year commitments. The member distribution cooperatives have signed full requirements contracts with Big Rivers which commit them till 2023. Explain why Alcan's 14 year commitment justifies fixed rates while the member distribution cooperatives, who have committed to a longer term, have rates subject to future changes.
- 3. Refer to Eyre Direct Testimony, page 29. What does Mr. Eyre mean when he states that the Commission can "investigate the impact of deregulation on Western Kentucky without the [S]melters as a wild card"?
 - 4. Refer to Eyre Direct Testimony, page 30. Mr. Eyre states,

The proposed contract with Henderson Union gives Alcan both the right and the risk of arranging Tier 3 Service. . . . The parties took care to assign total responsibility to Alcan in order to eliminate any risk to Henderson Union or Big Rivers. Alcan alone has the responsibility of

identifying the energy supplier, setting the terms of the transaction, calculating the amount of losses involved and securing the transmission path.

If Alcan is assuming all of these risks and responsibilities, explain why Alcan does not directly contract with the energy supplier for Tier 3 Service.

- 5. Refer to Eyre Direct Testimony, pages 30-31. Under the terms of the proposed contract, can Henderson Union reject the energy supplier identified by Alcan for reasons other than those enumerated on these pages? If yes, state these other reasons. If no, explain why not.
- 6. Assume that the proposed agreements between Alcan, Henderson Union, and Big Rivers become effective in their current form and that the Commission approves the proposed Big Rivers tariff. Further assume that Alcan subsequently closes its facilities and leaves the Big Rivers and Henderson Union systems. For each effective closure date listed below, calculate the amount Alcan would be required to pay Big Rivers and Henderson Union at closure and compare this amount to the total revenues expected from Alcan if it remained on the system through the end of its contract.
 - a. January 1, 2001.
 - b. January 1, 2005.
 - c. January 1, 2009.
- 7. Refer to Eyre Direct Testimony at pages 12-13. For each plant shut down in February 1994, what was its average per kWh power costs for 1993?
 - 8. Refer to Eyre Direct Testimony, page 20.

- a. Provide the calculations which support the contention that the interim rates represent a \$1.2 million monthly benefit to the rural ratepayers.
- b. Explain why the rural customers would not have received this benefit absent the Smelters' efforts.
- 9. At page 26 of his Direct Testimony, Mr. Eyre states that to facilitate the settlement process the Smelters agreed to pay higher rates up-front in the early years of the proposed bankruptcy plan. Under the terms of the present Smelter contracts, with each Smelter's ability to reduce its contract demand by 50 MW, are not the Smelters also paying higher up-front rates in comparison to later years when contract demand is reduced?
- 10. Refer to Eyre Direct Testimony, page 27, lines 4-5. Explain why this is a "pay me now or pay me later" proposition.
- 11. Refer to the Direct Testimony of Kemm C. Farney, page 5. Mr. Farney states that *Margins Under Fire: Wholesale Power Pricing In Northeastern Markets* was a multi-client study which his clients have used to examine their opportunities in bulk power markets and to appraise the value of their generation assets.
- a. Who are these clients (e.g., utilities, independent power producers, industrial customers with cogeneration capabilities)?
- b. If these clients are industrial customers, in what type(s) of industries are these clients involved?

- 12. When Mr. Farney examined the East Central Area Reliability Council ("ECAR") region, what, if any, differences between the various states located in ECAR (e.g., presence of nuclear generation) did he consider?
- 13. Refer to Farney Direct Testimony, page 10. Mr. Farney states that real power prices in ECAR are expected to decline an average of 0.2 percent annually over the period 1995 through 2010, with a steeper decline occurring immediately after the effective deregulation of wholesale markets.
- a. Is it Mr. Farney's position that effective deregulation of the wholesale power market will not occur until after 2010?
 - (1) If yes, explain how Mr. Farney reaches that conclusion.
- (2) If no, when does Mr. Farney believe the wholesale power market will be deregulated?
- 14. Refer to Farney Direct Testimony, page 16 and Exhibit C. Provide Exhibit C which includes columns 17 through 20, as referenced on page 16.
- 15. Refer to Farney Direct Testimony, page 16. Mr. Farney indicates that he calculated that over the life of the tariffs, the Smelters would pay \$1.625 billion for their power requirements if the power was purchased on the spot market for delivery the next day.
- a. Given the Smelters' volume of power use and their load factors, can such purchases be realistically made from the spot market for next day delivery in today's wholesale market?

- b. If no, explain why the comparison of this cost to tariff rates constitutes a valid comparison.
- 16. Refer to Farney Direct Testimony, page 17. Mr. Farney states that he discussed the concept of long-term purchased power contracts with "several power marketers and others who are very familiar with the deals actually being made today." Identify each person to whom Mr. Farney is referring and that person's firm or organization.
- 17. Given Mr. Farney's examination of margins in the competitive wholesale market.
- a. Indicate as a percentage the margins that power marketers and other sellers of wholesale power generally are realizing in today's market.
- b. What changes, if any, will occur to the level of margins realized in the wholesale power market in future years? Explain the response.
- 18. When preparing *Margins Under Fire: Wholesale Power Pricing In Northeastern Markets*, what consideration did Mr. Farney give to the possible effects of the Midwest Independent System Operator on wholesale market prices?
- 19. Refer to Farney Direct Testimony, Exhibit C, column 15. Prepare a schedule which compares the Market Prices shown on this exhibit with the blended power costs shown in Appendix L of Big Rivers' Application (for Southwire, pages 5 and 23 of 67, line 131; for Alcan, pages 7 and 25 of 67, line 173).

- a. Would Mr. Farney agree that the change in the mix of Tier 1 and Tier 2 power for the Smelters is the primary reason that the blended power costs shown in Appendix L fall below and remain below his market prices in Exhibit C?
- b. Would Mr. Farney agree that for either Southwire or Alcan, the blended power costs shown in Appendix L are significantly lower that the market prices in Exhibit C?
- 20. Refer to Farney Direct Testimony, Exhibit C. The proposed Smelter tariffs for Big Rivers include the option of the Smelters purchasing Tier 3 Interruptible and/or Backup power instead of using other suppliers. Assume that from 2001 through 2011, the Tier 3 Interruptible power is available for the full amount provided in the proposed tariff and that the Tier 3 Backup power is available to make up the remainder of the Smelters' Tier 3 needs. If the market prices shown on Exhibit C reflect the prices actually available, would Mr. Farney agree that it could be more economical for either Smelter, in any given year, to purchase Tier 3 Interruptible and Backup power from Big Rivers rather than purchasing power from another supplier at market?
- 21. Refer to Farney Direct Testimony, Exhibit D. Prepare a chart similar to that shown in Exhibit D, expressed in dollars per MWH rather than millions of dollars. Indicate the source of the values plotted on the chart.
- 22. For purposes of determining a representative market price for this proceeding, Mr. Farney used Cinergy power purchases in his analysis.
 - a. Is Cinergy an aluminum Smelter?

- b. What type of purchase were the Cinergy purchases (wholesale, retail)?
- c. Can the Smelters currently purchase power in the same fashion as Cinergy?
- d. Can any other customer of Big Rivers' member distribution cooperatives currently purchase power in the same fashion as Cinergy?
- 23. Refer to Farney Direct Testimony, page 14, lines 8-11. Explain why there was not an active, liquid, cash market for off-peak power in Big Rivers' area during 1995?
 - 24. Refer to Farney Direct Testimony, page 16, lines 13-28.
- a. Are the Smelters currently, or have they ever been, eligible to participate in a spot market for power?
 - b. If no, explain the relevance of the statement which begins at line 22.
- 25. At page 18, lines 10-14 of his Direct Testimony, Mr. Farney describes the Smelters as extremely reliable and predictable long-term customers. For each Smelter, provide the following information:
- a. The amount of power that is firm and subject to a take-or-pay provision under its current contract.
- b. The amount of power that will be firm and subject to a take-or-pay provision under its contract.
- c. The amount of power purchases in each of the previous five years that was firm under its contract and the amount that was supplemental.

- 26. Refer to the Direct Testimony of John B. Henderson.
- a. Is Southwire assuming all of the risks and responsibilities associated with the Tier 3 Service, as described in the proposed agreements between Green River and Southwire?
- b. (1) If yes, explain why Southwire does not directly contract with the energy supplier for Tier 3 Service.
- (2) If no, describe the risks and responsibilities not being assumed by Southwire.
 - 27. Refer to Henderson Direct Testimony.
- a. Under the terms of the proposed contract, can Green River reject the energy supplier identified by Southwire for reasons other than the transaction could adversely affect system reliability, present a hazard to employee safety, or create a liability that is outside the Southwire indemnification?
 - b. (1) If yes, describe the other reasons.
 - (2) If no, explain why not.
- 28. Assume that the proposed agreements between Southwire, Green River, and Big Rivers in their current form become effective and that the Commission approves the proposed Big Rivers tariff. Further assume that Southwire subsequently closes its facilities and leaves the Big Rivers and Green River systems. For each effective closure date listed below, calculate the amount of revenues Southwire would be required to pay Big Rivers and Green River at closure and compare this amount to the total revenues expected from Southwire if it remained on the system through the end of its contract.

- 29. Refer to Henderson Direct Testimony, page 3, lines 7-11.
- a. Provide a table which lists the 23 aluminum Smelters in North America.
- b. For each Smelter listed in (a), provide the megawatt load and the average price paid per kWh including both energy and demand for the most recent 12-month period available.
- 30. Refer to the Direct Testimony of David H. Klieman. Witnesses for the Smelters have indicated that under the proposed Tier 3 Service provisions in the Big Rivers tariffs, they are assuming all of the risks and responsibilities associated with power purchased under the Tier 3 option.
- a. Can either Alcan or Southwire directly contract with a third-party energy supplier for the proposed Tier 3 Service? Explain the response.
- b. If yes, explain why the Smelters, the respective distribution cooperatives, and Big Rivers have proposed a mechanism which involves the distribution cooperatives in the contract process, rather than utilizing a direct contract approach with the Smelters.
- 31. Refer to Klieman Direct Testimony, page 7, lines 7-11. Identify the attorneys and consultants who directly represented the four member distribution cooperatives.
- 32. At page 7 of his Direct Testimony, Mr. Klieman states that the member distribution cooperatives had access to the consultants employed by Big Rivers.
 - a. Does Mr. Klieman consider this access to be "arms length"?

- b. Does Mr. Klieman believe that the goals and objectives of Big Rivers and the member distribution cooperatives were the same in regard to the bankruptcy proceeding?
 - 33. Refer to Klieman Direct Testimony, page 8, lines 5-11.
- a. Define each "class" that is involved in the bankruptcy proceedings and list its members.
 - b. Describe the rights and priorities of each class.
- c. Explain why the Smelters were a separate and distinct class from the distribution cooperatives or the rural customers. Why were other large industrial customers not members of the Smelters' class?
 - 34. Refer to Klieman Direct Testimony, page 11, lines 2-4.
 - a. To whom does the term "ratepayers" refer?
- b. List the names of all industrial and rural customers who expressed the sentiment that "the sooner the matter was resolved, the sooner they would see a reduction in their rates."
- 35. Refer to Klieman Direct Testimony, page 17, lines 3-13. Given the Commission's exclusive jurisdiction over rates, why was it appropriate to develop a plan of reorganization that does not allow the Commission to modify the rates if they are not found to be fair, just and reasonable?
 - 36. Refer to Klieman Direct Testimony, page 19, lines 7-9.
 - a. What is the amount of the LG&E "additional sum"?

- b. With regard to cash flow, who benefits from the LG&E "additional sum"?
- c. Does the Rural Utilities Service ("RUS") receive this "additional sum" at closing?
 - 37. Refer to Klieman Direct Testimony, page 19, lines 16 through 20.
- a. What would have been the impact on Smelter rates if no agreement had been reached that provided for new rates by September 1, 1997?
- b. What would have been the impact on the rural and other customers' rates if no agreement had been reached that provided for new rates by September 1, 1997?
- 38. At page 18 of his Direct Testimony, Mr. Klepper states that "retail wheeling will be a reality in Kentucky and throughout the United States in the foreseeable future."
- a. Explain the basis for Mr. Klepper's conclusion that retail wheeling will be a reality in Kentucky in the foreseeable future. Provide all analyses and studies which he has prepared or reviewed to reach this conclusion.
 - d. Define "foreseeable future."
 - 39. Refer to Klepper Direct Testimony, page 18, lines 25-26.
- a. Define "any functional equivalent" of retail wheeling. Provide examples of a "functional equivalent" of retail wheeling.
 - 40. Refer to Klepper Direct Testimony, pages 20-22.
- a. Is Mr. Klepper aware of any other industrial customer in the United States which is currently served under a tariff similar to that proposed for the Smelters?

- b. Is Mr. Klepper aware of any customer group, other than industrial customers, in the United States which is currently served under a tariff similar to that proposed for the Smelters?
 - c. If yes to either part a) or b) above, provide the following information:
 - (1) The name of the customer.
 - (2) The location of the customer.
- (3) The name of the primary energy supplier for the customer's location.
 - (4) A general description of the tariff provisions.
 - (5) The year the tariff became effective.
 - (6) The status of electricity restructuring in the customer's state.
- 41. At page 22 of his Direct Testimony, Mr. Klepper states that the fee to each distribution cooperative cannot be justified on a cost basis. Explain why, if the distribution cooperative is the entity which signs the contract with the third-party energy supplier under Tier 3 Service, the distribution cooperative is not entitled to some amount of financial compensation.
 - 42. Refer to Klepper Direct Testimony, page 25.
- a. Is Mr. Klepper aware of the formation of the Midwest Independent System Operator ("ISO")? Briefly describe his understanding of the Midwest ISO.
- b. (1) Has Mr. Klepper considered the effect on Big Rivers' proposed transmission demand charge if Big Rivers joins the Midwest ISO?

- (2) If yes, how will Big Rivers' membership in the Midwest ISO affect Big Rivers proposed transmission demand charge.
- c. (1) If Big Rivers joins the Midwest ISO and the transmission demand charges are increased, is it correct that under the terms of the proposed Smelter tariff that the Smelter transmission demand charge will not change?
- (2) If yes, would this portion of the proposed tariff remain "fair, just, and reasonable?" Explain.
- 43. Refer to Klepper Direct Testimony, Exhibit RLK-3A. The chart showing Alcan's monthly load pattern reflects the assumption that all three potlines are in operation.
 - a. Are all of Alcan's potlines currently in operation?
 - b. (1) If not, when will all three potlines be in operation?
- (2) Resubmit Exhibit RLK-3A showing the load pattern which reflects the number of potlines currently in operation.
 - 44. Refer to Klepper Direct Testimony, page 19, lines 19-21.
- a. Under current Kentucky law, what direct access do the Smelters have to the wholesale power markets?
- b. Under current Kentucky law, what direct access do Big Rivers' rural customers have to the wholesale power markets?
- c. (1) Under current Kentucky law, do the Smelters have any greater direct access to the wholesale power markets than Big Rivers' rural customers?
 - (2) If yes, explain.

- 45. Refer to Klepper Direct Testimony, page 25, lines 20-27 and page 26, lines 1-19. Define "retail wheeling."
 - 46. Refer to Klepper Direct Testimony, page 35, lines 10-16.
- a. Does this sentence describe what is commonly referred to as "retail wheeling"?
 - b. Does this sentence meet Mr. Klepper's definition of "retail wheeling"?
- 47. Refer to the Direct Testimony of Lane Kollen, pages 8-10. Mr. Kollen has indicated that his "multijurisdictional case" analysis represents a likely outcome of a fully litigated rate-making proceeding in the absence of the global settlement. He identifies various adjustments that he made when computing the revenue requirement for Big Rivers under the multijurisdictional case scenario.
- a. Are the non-member activities that Mr. Kollen has recognized as a separate jurisdiction in his multijurisdictional case scenario subject to the Commission's regulation?
- b. When computing the interest and margin requirements for the multijurisdictional case scenario, explain why it was reasonable to use the interest rate contained in the global settlement instead of the interest rate on Big Rivers' debt in effect prior to the settlement.
- c. Explain why a times interest earned ratio of 1.05 is reasonable for either the base case or multijurisdictional case scenarios. Include all studies and analyses prepared by or reviewed by Mr. Kollen to reach his assumption.

- d. If the multijurisdictional case scenario is designed to reflect the results of a rate-making proceeding absent the global settlement,
- (1) Explain why Mr. Kollen included reductions to outside services expense and regulatory commission expense to levels which reflect the results of the global settlement.
- (2) Why is it reasonable to expect these expense categories will be at the same level, whether there is a global settlement or not?
- (3) Absent the global settlement, would Big Rivers be able to have a fuel adjustment clause and apply for a new environmental surcharge? Explain.
 - 48. Refer to Kollen Direct Testimony, Exhibits LK-2 and LK-3.
- a. Explain why Mr. Kollen's calculation of rate base does not include construction work in progress ("CWIP") and a cash working capital allowance.
- b. Does Mr. Kollen agree that the Commission normally includes CWIP and a cash working capital allowance in its determination of rate base?
- c. Explain how Mr. Kollen determined that any portion of the Big Rivers' rate base was financed through capital credit investments.
- d. Given that Big Rivers' equity is negative, is it reasonable to assume that the rate base is solely financed by debt? Explain the response.
- e. Explain why the interest expense calculation does not reflect the normalized interest expense on the outstanding debt which Big Rivers is obligated to repay.

- 49. Concerning the lease agreement contained in Big Rivers' application, does Mr. Kollen believe the lease is a capital or operating lease? Explain how he reached his determination and list the factors which he considered.
 - 50. Refer to Kollen Direct Testimony, pages 7-8.
- a. Provide the authority (i.e., the Commission Order(s)) that support Mr. Kollen's statement that "[r]ecognition of a separate jurisdiction for the off-system market is consistent with the Commission's orders in prior Big Rivers' proceedings."
- b. Do any of these orders specifically allocate assets and expenses to non-members?
- 51. Provide specific support for the conclusion in Kollen Direct Testimony at page 8, lines 8-10, that the multijurisdictional case represents a likely outcome if the Commission were to review the excess capacity and Wilson issues.
- 52. Refer to the Direct Testimony of Michael D. Yokell, page 13, lines 5-8. Identify the other interested parties involved in the development of the proposed rates and rate structure.
- 53. Refer to Yokell Direct Testimony, page 15, lines 7-11. Provide a detailed discussion of the "circumstances" where the proposed rates could favor the Smelters.
- 54. At page 19 of his Direct Testimony, Mr. Baron states that, "As such, this cost of service study, based on Big Rivers' own data, provides the Commission with the necessary underlying cost support for the settlement rates being proposed by Big Rivers and other parties in this proceeding."

- a. Describe in detail how Mr. Baron's cost-of-service study differs from the cost-of-service study sponsored by Big Rivers witness Frank Graves.
- b. Does Mr. Baron believe that the cost-of-service study sponsored by Mr. Graves supports the settlement rates?
- c. Does Mr. Baron believe that his cost-of-service study also supports the settlement rates?
- d. (1) Is the Big Rivers data used in Mr. Baron's cost-of-service study proformed and post-restructuring?
- (2) Is it Mr. Baron's understanding that the cost-of-service study prepared by Mr. Graves used Big Rivers' proformed and post-restructuring data?
- e. The Attorney General's witness, Mr. David H. Brown Kinloch, states on page 37 of his testimony that "Big Rivers Cost of Service Study is, for the most part, based on non-pro forma pre-restructuring costs." Does Mr. Baron agree with this conclusion? Explain.
- 55. Explain why Mr. Baron prepared and presented another alternative cost-of-service which is shown in Baron Exhibit (SJB-6) and discussed on page 22 of his testimony.
- 56. Refer to Mr. Baron's Exhibit (SJB-5). Provide a key to all allocation factors used in this study.
- 57. Refer to the Direct Testimony of Raymond L. Biscopink, page 15. Mr. Biscopink states that although Big Rivers' revenue projections estimated Willamette's demand to be 55.5 MW at a 94 percent load factor, the actual load will increase to 70

MW in 1998 and 80 MW sometime in late 1998 or 1999. Explain how Mr. Biscopink reached this conclusion, considering the fact that an examination of the computer spreadsheet disc¹ used to generate Appendix L of the application shows that Big Rivers did model the increases in Willamette's demand.

- 58. Refer to Biscopink Direct Testimony, page 2, lines 5 through 7.
 - a. Define "competitive regional power prices."
- b. Provide a table which reflects the regional power price per kWh for the first nine months of 1997 in one column and in another column provide the average per kWh price paid by Willamette for each month.
 - 59. Refer to Biscopink Direct Testimony, page 5, lines 10 through 13.
- a. Provide the names and addresses of Willamette's competitors which currently have access to market-based power. Indicate which competitors are participating in pilot programs and which have permanent access to market-based power.
- b. For each company shown in (a) above, provide the average price paid per kWh for the last six months.
- c. Provide the names and addresses of competitors that will be eligible to purchase market-based power in 1998 under utility pilot programs.
- 60. Refer to the Direct Testimony of David H. Brown Kinloch, pages 41 through 44. Mr. Brown Kinloch has proposed an energy rate of 19.58 mills per kWh and demand charge of \$5.36 per kW per month.

Response to the Commission's July 24, 1997 Order, Item 3.

a. Has Mr. Brown Kinloch undertaken an analysis to determine whether

these rates would generate a sufficient cash flow over the life of the lease transaction

which would allow Big Rivers to meet its debt service payments?

b. If yes, what was the result of that analysis?

61. Refer to the Direct Testimony of David H. Brown Kinloch, page 37. Using

the cost-of-service study prepared by Big Rivers' Witness Frank Graves as an example,

explain and demonstrate why you believe Big Rivers' study is based on non-proformed

and pre-restructuring costs.

62. Refer to the Direct Testimony of David H. Brown Kinloch, pages 53-54 and

Exhibit DHBK-15. Other than using proformed, post-restructuring cost data and a 12-CP

demand allocation methodology, did Mr. Brown Kinloch make any other changes to Big

Rivers' cost-of-service study in preparing his Exhibit DHBK-15? If yes, list and describe

these changes.

Done at Frankfort, Kentucky, this 21st day of October, 1997.

PUBLIC SERVICE COMMISSION

For the Commission

ATTEST:

Executive Director